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ABSTRACT

This paper reports the results of a 4-year study of a consortium of 22 school districts undergoing systemic reform. Results are framed in terms of individual district reform status at the end of the 4 years in 6 areas: curriculum, parent-community involvement, classroom practice, professional development, administration and leadership, and system change. As an overall result of the analysis of these areas, districts were identified as low, moderate, or high in reform status. Comparisons were made of reform status and gain in student achievement, provision of additional funding, and demographics of the district. High-reform districts had larger gains in student achievement, but even these gains were less than overall state gains for the same period. Funding presented a mixed picture in terms of reform status. Also included is an appraisal of the consortium model as a means to provide technical assistance to a group of districts. In addition to the data obtained, findings were also derived from a "lessons learned" workshop session conducted at a final conference. Appendices contain explanatory material for reform elements. (Contains 20 references.) (Author/DFR)

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A STUDY OF A CONSORTIUM MODEL TO SUPPORT SCHOOL DISTRICT SYSTEMIC REFORM

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ABSTRACT

This paper reports on the results of a four-year study of a consortium of school districts undergoing systemic reform. Results are framed in terms of individual district reform status at the end of the four years in six areas: curriculum, parent-community involvement, classroom practice, professional development, administration and leadership, and system change. As an overall result of the analysts of these areas districts were identified as low, moderate, or high in reform status. Comparisons were made of reform status and gain in student achievement, provision of additional funding (half of the districts received), and demographics of the district. High reform districts had larger gains in student achievement but even these gains were less than overall state gains for the same period. Funding presented a mixed picture in terms of reform status. Also included is an appraisal of the consortium model as a means to provide technical assistance to a group of districts.

BRIEF BACKGROUND: USE OF A CONSORTIUM MODEL

The move toward systemic reform in education can be traced to the late 1980's (McAdams, 1997, Vinovskis, 1996) when the results from studies of earlier reforms intended to implement a more intellectually challenging curriculum and result in improved student results showed few real improvements. Policy analysts focused on three areas of concern: incompatible policy signals in the system, policies that push toward mediocrity, and the need for district capacity building. Well-established student achievement goals are required as well as a review of the resources necessary to attain them, especially in high poverty schools (Clune, 1993, O'Day & Smith, 1993). The need for a more integrated and comprehensive approach involving multiple components of the educational system as well as federal, state, and local policymakers was evident. To accomplish this O'Day and Smith (1993) called for strong state and national roles while Clune (1993) suggested alternatives to centralization but also acknowledged the need for a systemic educational policy. As often happens, a midground has evolved with no national curriculum or national assessments but varying state requirements in both areas. The standards-based reform movement gained momentum during the same decades and in many states the establishment of state standards became the predominant state role and provided direction for schools undergoing systemic reform efforts (Fuhrman, 1994).

As systemic reform efforts were initiated in districts, studies revealed the lack of teacher and administrator capacities to succeed with reform initiatives and suggested a need for eternally provided professional development and technical assistance (Massell, Kirst, & Hoppe, 1997; Stephens, Leiderman, Wolf, & McCarthy, 1994). Studies of successful districts (Sammons, 1999; Shields, Knapp, & Weschler, 1995; St.John & Pratt, 1997) indicated the importance of high expectations for student accomplishment, pervasive instructional focus, adequate local leadership, supporting relationships with the national reform community, teachers able to use national standards to guide instruction, and the building of new local programs such as reform-based professional development plans. States themselves scrambled to deliver the assistance needed in a time of shrinking state education departments (Massell, 1998, Shields & Knapp, 1997). At the same time, states, under standards-based reforms, were attempting to prepare and deliver an arsenal of new policy instruments such as curriculum standards and state-wide assessments (Spillane, 1999).

Fullan (1996) had anticipated problems of fragmentation and overload in systemic change efforts and recommended purposeful, structured networking of schools as a means to deal with this barrier. Massell (1998) identified three kinds of networks intended to develop the local capacity for reform: one that focuses on improving knowledge and skills of participating individuals and organizations, one that deploys teachers and other experts to assist local practitioners, and one that

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develops and distributes products. Bol et al. (1998) studying support for teachers in New American Schools restructuring models found that collaboration among teachers emerged as the most positive support variable. Even earlier, Lieberman, Darling-Hammond, & Zuckerman (1991) found that establishing networks provided inspiration and reassurance as well as answers to educational and logistic dilemmas facing teachers in reform. Recommendation of the use of networking as a strategy to support reform at both individual and organizational levels is now common (Education Commission of the States, 1997, Kimmelman et al., 1999, Research Triangle Institute, 1999).

FRAMING THE WORK

This paper reports on an evaluation of a consortium that was formed as a network of districts participating in a National Science Foundation (NSF) funded statewide systemic initiative. Such intentional networks of districts undergoing systemic reform were few in number in 1993 when the study began. The consortium offered promise as a means to provide the professional development, technical assistance, and collegial learning needed for reform to be successful. Participating districts each identified a Design Team of up to six members who attended networking conferences at least twice a year over the four years of the consortium's life. The conceptual and structural base for the consortium and its evaluation are found in cluster evaluation, an approach to evaluation developed primarily under the auspices of the W.K.Kellogg Foundation (Barley, Z.A. & Jenness, M., 1993). As implemented, the cluster evaluation of the consortium included development and endorsement of a set of common outcomes, participation in twice yearly networking conferences, varying funding support, and technical assistance from a variety of sources. In addition, each district was required to develop a strategic plan, form a Design Team, and participate in evaluation activities including reporting annually on accomplishments of the goals and objectives of the plan. Consortium leaders and the districts, using proposal materials submitted by the districts, arrived at consensus on a set of 17 common outcomes in four areas: systemic reform, underrepresented groups, community involvement, and mathematics and science curriculum and instruction. These became the focus of strategic planning and reporting in each district and the focus of the technical assistance activities.

The evaluators (authors of this paper) served as part of the Management Team for the statewide systemic initiative of which the consortium was a component. Opportunities were provided in networking conferences for evaluation activities such as interviews and focus groups as well as structured within or cross-district reflective work as part of the evaluation.

STUDY AND METHODOLOGY

Sample

The state department of education invited districts to submit an application for funds to support systemic reform. Preference in funding was given to low performing districts or districts with high minority populations. Following a review and selection process, 24 districts were chosen to participate in the consortium. Two of the selected applicants were themselves consortia of very small rural districts and are not included in this study. The twenty-two districts in the study included one large city, 7 mid-size city districts, 3 suburban areas, and 11 rural locations. All were located within a single mid-western state with a state-wide standardized, criterion-referenced assessment system including tests in reading, science, mathematics, and writing at three grade levels. Ten of the districts were designated as target districts based on test results and percentage of minority students.

Target districts received annual grants ranging from $25,000 to $65,000 for the first three years of the program. The remaining districts were designated affiliate districts and participated in all of the professional development and technical assistance but did not receive funding other than that needed to attend networking conferences and professional development offerings. Half of the affiliate districts qualified for target status but had lower ratings on their proposals and were invited to participate without funding (target affiliates). The remaining affiliate districts did not qualify for target status but had high ratings on their proposals and were also invited to participate as affiliates.

Data Collection

Data collection was extensive and constant beginning with district focus groups held on site. Each networking conference was an occasion for additional data collection; for example, interviews of Design Team members, review of Design Team data developed pre-conference and brought to the meeting, and evaluative data generated by reflective exercises. Documents were collected as indicated below, site visits made, and teacher surveys conducted. For each district a portfolio was created consisting of:

- demographic variables such as size and free/reduced lunch,
- annual test scores in mathematics and science,
- annual district reports of progress for each of four years,
- district proposals for funding and continuation of funding,
- site visit transcripts (2 site visits per district in the first and third years),
- focus group interviews on site and with Design Team members,
- District Progress Report (self evaluation in the third year),
- teacher survey (end of third year),
- district survey and documents including school improvement reports, curriculum materials and disaggregated test scores.

Data collection for the consortium model consisted of a survey of Design Team members soliciting assessment of four program aspects (strategic planning, Design Teams, networking conferences, and evaluation activities) and with questions about the availability of funding. A "lessons learned" workshop was held for all participating districts in the final year.

Data analysis

The organizing framework for the district analyses presented in this paper were six elements of systemic reform: curriculum, parent-community involvement, classroom practice, professional development, administration and leadership, and system change. Progress on these six areas defines successful reform in this study. In addition test scores were analyzed for the districts across the four years. The consortium itself as a model to support systemic reform was studied through analysis of the Design Team survey.

For the district analysis, the research team created a five-point rubric for each of the six areas of reform with anchors describing the "old system" scored as a 1 and an "exemplary" system scored as a 5. (See Appendix 1.) Researchers reviewed the portfolios with at least two researchers reviewing each district. Inter-rater reliability was established through achieving consensus not only between the two reviewers but also through presentation and discussion of scores to establish a common understanding of the scoring across the four-member team.

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The analysis of the consortium included descriptive statistics of the survey data and the post conference evaluations.

RESULTS: DISTRICT LEVEL ANALYSIS

Six elements of systemic reform

Frequency of ratings and means for each of the six areas of reform are shown in Table 1. The average ratings across all 22 districts on the six areas of reform ranged from 2.5 for classroom practice to 3.4 for parent-community involvement. Only professional development had no districts rated 1. Both Curriculum and Classroom Practice had no districts rated 5.

		Number of districts rated:				
ELEMENT	Average	1	2	3	4	5
Parent-Community Involvement	3.4	2	1	9	6	4
Professional Development	3.2	0	8	4	7	3
Administration & Leadership	3.2	3	5	4	4	6
System Change	2.9	6	2	4	7	3
Curriculum	2.7	4	6	4	8	0
Classroom Practice	2.5	2	9	9	2	0

Table 1. District ratings on six elements of reform/1=Old System, 5=Exemplary

Appendix 2 includes a single page for each of the six elements showing the average rating across the 22 districts, the frequency for each rating level and a description of the element for the districts rated at each level. For Parent-Community Involvement the two districts rated 1 exhibited involvement limited in both amount and type for both parents and community members. The kind of involvement was occasional and in traditionally organized events such as parent conferences or career days. A role more student-engaged and more innovative parent-community programming characterize districts that were rated higher than 1 as does strong effort to recruit/engage these groups. The four districts rated 5 demonstrated practices such as including parents in inservices and organizing community staffed homework stations in outlying communities.

No district was rated 1 in Professional Development (PD). The three districts rated 5 had developed and implemented strategic plans for PD, had sustained PD with follow up and measurable outcomes, and had considerable teacher input to planning and implementation. In Administration and Leadership three districts were rated 1. All three had experienced considerable turmoil with turnover of leadership. The 6 exemplary districts had empowered teacher leaders; the administrator was seen as a strong visionary and advocate for reform who had taken specific actions in support. In System Change 6 districts were rated 1. Frequently the role and influence of the design team affected the likelihood of systemic change occurring. In one district in this group urgent student needs precluded reform. Three districts were rated as 5. Mechanisms for effective internal and external networking were evidenced as well as careful capacity building among all stakeholders. In Curriculum four districts were rated 1. Typically they had unwritten or unused curriculum documents with decisions about what to teach left to the individual teacher. No district

was rated a 5. Finally in Classroom practice, 2 districts were rated 1. Teachers reported high use of traditional teaching practices. There were no districts rated 5.

District average total scores

Total scores were tallied for the 22 districts across all 6 elements. The distribution of cumulative scores of the six elements was bimodal with 8 districts having a cumulative score in the range of 9 to 13 and 14 districts having a cumulative score between 18 and 27. See Figure 1.

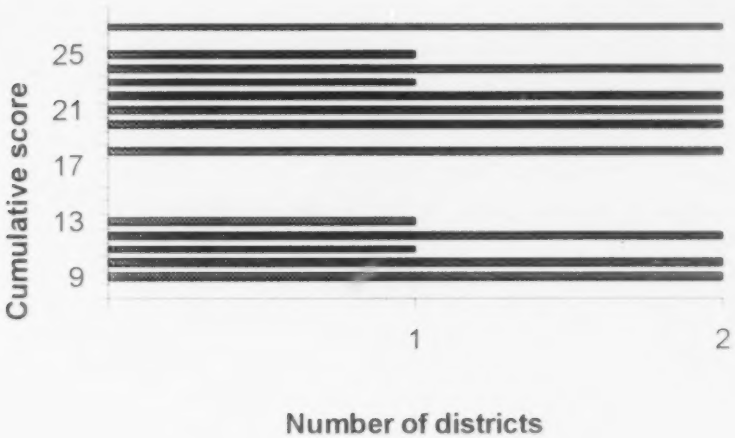

Figure 1. Distribution of district cumulative scores.

District reform and student achievement

In order to explore connections between the rated levels of reform on the six elements and student achievement, districts were grouped into three categories: low reform, moderate reform, and high reform. The 8 districts shown in Figure 1 with overall scores ranging from 9 to 13 were grouped as low reform. The 14 districts with overall scores between 18 and 27 were further divided into two groups. The high reform group had high scores on all 6 elements and at least one exemplary (5) rating. The moderate group had only moderate ratings across all six with no exemplary rating or had uneven ratings across elements.

To assess student achievement changes during the four years of reform, 4th grade scores from the state mathematics test in the first year of reform were compared to 7th grade (to some degree the same students) scores three years later. Scores in this case are the percent of students achieving satisfactory status. Table 2 indicates the average percent achievement change for the three reform groups. The right hand column compares that gain to the overall state gain (12.7%) for the same period. Thus none of the three groups' average gains equaled the state gain.

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Reform Status	Avg. Group Change	Compared to State Change
Low	+0.23	-12.5
Moderate	+1.03	-11.7
High	+9.50	-3.2

Table 2. Change in student achievement by reform status

District reform and funding status

A comparison was made between funding status and reform level. Funding status was either as a target district with an annual award ranging from $25,000 to $65,000, or as an affiliate district with funding only to support attendance at networking conferences. Affiliate districts were also divided into target affiliates - those who initially qualified for target status and therefore were academically low performing districts - and affiliates, those who did not qualify as targets. As shown in Table 3, 27% (3/11) of the target districts, 29% (2/7) of the target/affiliates, and 50% (2/4) of the affiliate districts were rated high on reform. All three funding groups had districts that did not demonstrate high reform.

Funding Type / Reform Type:	Funded	Not funded	
	Target	Target-Affiliate	Affiliate
Low	36%	57%	0%
Moderate	36%	14%	50%
High	27%	29%	50%

Table 3 Relationship of reform status to funding type

District reform and demographics

The relationship between various district demographic statistics and reform status was also examined. Reform status did not relate to percent minority enrollment or percent free and reduced lunch. Districts with fewer than 5000 students were found across all three reform categories. Districts larger than 5000 students were not found in the high reform status group.

DISCUSSION: DISTRICT LEVEL ANALYSIS

The conclusions that can be drawn from this study are tentative at best. This work represents an attempt by an evaluation team to take evaluation findings and make some sense of them for the field. The study demonstrates all of the frustrations of not being able to rule out alternative explanations in the absence of comparison data. Thus, the reader is cautioned that the conclusions that follow must be understood in the light of those limitations.

The majority of the districts (18/22) were drawn from the group of lowest performing districts in the state. Viewed at the end of four years in six areas of reform taken from the literature and using those same sources for criteria of accomplishment, 56% (10/18) of these districts were able to achieve moderate or high reform status. Those who achieved high reform had higher student achievement gains than those who did not. But even then they did not close the gap compared to the overall state gain. In this case, an important follow up study will be to revisit these districts in three to five years to see if reform has been sustained and student achievement gains maintained. Classroom practice was rated lowest of the six elements and unless change occurs there student achievement gains are less likely.

A second area of note is that funding did not play a clear role in accomplishing reform. About the same number of funded low performing districts were judged high reform status as the non-funded. But more of the non-funded group, which did receive PD and technical assistance, did not demonstrate reform. For both funded and unfunded districts, some districts were rated low at the end of the four years. None of the affiliate districts were rated low at the end of four years.

RESULTS: CONSORTIUM LEVEL ANALYSIS

Analysis/findings from the survey

A survey of Design Team members conducted at the end of the four years covered five elements of the consortium model: 1) required strategic planning framework, 2) biannual technical assistance and networking conferences, 3) feedback of district evaluation results, 4) use of a design team including community members, and 5) annual funding. Nearly 75% of the respondents indicated that their strategic plans were active documents often referred to and revised as necessary. They were unanimous in the opinion that the strategic plan helped them focus their work around goals and provided a way to assess progress and accomplishments. Design team members also agreed (96%) that to be effective, strategic planning needed to be integrated with school improvement planning (separately required by the state). Only 14% thought strategic plans were time consuming efforts with a low yield. Respondents also rated the networking conferences highly. The opportunity for networking among colleagues was cited most frequently (85%) as an important benefit. Design Team working time at conferences and reflective thinking about the larger issues of reform were second and third. Of the various methods evaluators used to provide feedback to districts, a midpoint review process in which districts presented their progress and planning for the remaining period to a panel of peers – they served on each others panels – was rated by 98% as adding value to their thinking and work. The design team structure itself was thought to be an important element in implementing reform (98%). The importance of top leadership serving on the design team was also cited (75% strongly agreed). Finally 90% of the respondents felt outside funding is essential for reform and that it needs to be substantial and continuing.

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Lessons learned: A group exercise

In addition to the data described above, findings were also derived from a "lessons learned" workshop session conducted at a final conference. The result of a careful process to describe and arrive at consensus about the reform process resulted in 11 broad lessons.

Lesson 1: Two key elements that help establish a context that is ready for reform are vision and climate.

Lesson 2: Each district must identify and use local reasons as an impetus for change.

Lesson 3: There must be leadership from both top administration and from the classroom.

Lesson 4: Managing the change process requires a dynamic strategic plan.

Lesson 5: School resources need to be managed effectively in order for systemic reform to be possible.

Lesson 6: Unique local solutions or ideas for getting external resources – not just money – exist and should be sought out.

Lesson 7: Collaboration with local, state, and national entities reduce the burden on local resources.

Lesson 8: Aligning local curriculum to state and national standards and to high stakes assessments is a necessary step.

Lesson 9: A plan for professional development of teachers and administrators is essential.

Lesson 10: A process that communicates with and engages stakeholders in the reform process requires a plan and emphasis.

Lesson 11: Reform is a set of processes – not a product.

UNSCIENTIFIC CONCLUSIONS: CONSORTIA AS A MEANS TO SUPPORT REFORM

The plan to develop a consortium of the districts engaged in this state systemic initiative came in part from the evaluator's previous experience with two cluster evaluations – consortia of districts funded by the W.K. Kellogg Foundation – and in part as a result of the NSF review panel's concern that accomplishing reform in low performing districts had not been successful through a mode of grantmaking with occasional monitoring. These districts certainly received more direct assistance than districts in most other state programs at the time, had more specific requirements for changing district practice, and had opportunities to work across districts at various levels to gain practical ideas and moral encouragement. Their reflections on the experience suggest a consortium model that includes requirements for a design team with key administrative leadership on the team, a strategic planning process, PD and technical assistance, and opportunities for networking. While districts perceive that outside (additional) funding is necessary, given limited state resources the consortia may be of greater use in the long run.

REFERENCES

Barley, Z.A. & Jenness, M. (1993). Cluster evaluation: A method to strengthen evaluation in smaller programs. *Evaluation Practice*, 14 (2), 141-147.

Bol, L., Nunnery, J.A., Lowther, D.L., Dietrich, A.P. Pace, J.B., Anderson, R.S., Bassoppo-Moyo, T.C., & Phillipsen, L.C. (1998). Inside-in and outside-in support for restructuring: The

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effects of internal and external support on change in New American Schools. *Education and Urban Society*, 30 (3), 358-384.

Clune, W. (1993). The best path to systemic educational policy: Standard/centralized or differentiated/decentralized? *Educational Evaluation and Policy Analysis*, 15(3), 233-254

Education Commission of the States (1997). A policymakers' guide to education reform networks. Denver CO: Author.

Fullan, M.G. (1996). Turning systemic thinking on its head. *Phi Delta Kappan*, February 1996, 420-422.

Fuhrman, S. (1994). *Challenges in systemic reform: Consortium for Policy Research in Education (CPRE)*. New Brunswick, NJ: Rutgers University.

Kimmelman, P., Kroeze, D., Schmidt, W., van der Ploeg, A., McNeely, M., Tan, A. (1999). *A first look at what we can learn from high performing school districts: An analysis of TIMSS data from the First in the World Consortium*. Washington DC: National Institute on Student Achievement, Curriculum, and Assessment, U.S. Department of Education.

Lieberman, A., Darling-Hammond, L., & Zuckerman, D. (1991). *Early lessons in restructuring schools*. National Center for Restructuring Schools and Teaching (NCREST). New York: New York.

Massell, D. (1998). State strategies for building local capacity: Addressing the needs of standards-based reform. *CPRE Policy Briefs*, RB-25, Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

Massell, D., Kirst, M.W., & Hoppe, M. (1997). Persistence and change: Standards-based systemic reform in nine states. *CPRE Policy Briefs*, RB-21, Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

McAdams, R. (1997). A systems approach to school reform. *Phi Delta Kappan*, October 1997, 138-142.

O'Day, J.A., & Smith, M.S. (1993). Systemic reform and educational opportunity. In S.Fuhrman (Ed.), *Designing coherent educational policy: Improving the system* (pp. 250-312). San Francisco: Jossey-Bass.

Research Triangle Institute. (1999). *Assessing the supply and demand sides for research, development, and technical assistance in systemic reform*. Research Triangle Park NC: Author.

Sammons, P. (1999). School effectiveness: Coming of age in the Twenty-First Century. Lisse, The Netherlands: Swets & Zeitlinger.

Shields, P.M. & Knapp, M.S. (1997). The promise and limits of school-based reform. *Phi Delta Kappan*, December 1997, 288-294.

Shields, P.M., Knapp, M.S., & Weschler, M.E. (1995). Improving schools from the bottom up: From effective schools to restructuring. Washington, DC: U.S. Department of Education, Office of Planning and Evaluation.

Spillane, J.P. (1999). State and local government relations in the era of standards-based reform: Standards, state policy instruments, and local instructional policy making. *Educational policy*, 13(4), 546-572.

St. John, M. & Pratt, H. (1997) The factors that contribute to the "best cases" of standards-based reform. *School Science and Mathematics*, 97 (6), 316-324.

Stephens, S.A., Leiderman, S.A., Wolf, W.C., & McCarthy, P.T. (1994). Building capacity for system reform. Bala Cynwyd, Pennsylvania: Center for Assessment and Policy Development.

Vinovskis, M.A. (1996). An analysis of the concept and uses of systemic educational reform. *American Educational Research Journal*, 33 (1), 53-85.

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Appendix 1. Anchors for the Elements of Reform

ELEMENT	1=OLD SYSTEM	5=EXEMPLARY
SYSTEM CHANGE	Reform program is not integrated with school improvement plans. Plans do not reflect a systemic approach to reform. Strategic plans do not demonstrate links between needs, objectives, activities, or what has occurred in the past. Internal and external networks minimal or non-existent. Decision-making fragmented. Little or no partnering.	District's plans are coherent and system changes are synergistic. Administrators and board are addressing policies that are barriers to reform. Resources are allocated to support new policies. The district has formed networks internally and externally that add substance and capacity to district efforts. There is shared decision-making and stakeholders have access to needed information. District partners with business, community groups, and parents.
CURRICULUM	District does not have or use a written curriculum based on current and /or national core curriculum standards. Mathematics and science scope and sequence are determined by individual teachers and independent of an articulated K-12 curriculum.	School board approved mathematics and science curricula based on current state and national standards are in pace. Curricula are articulated, coherent, and supported with programs and high quality materials and equipment. Policies intended to support the curricula are in place.
PROFESSIONAL DEVELOPMENT	Professional development of teachers is disjointed and disorganized. PD structure does not appear to be based on plans, vision, data, or state standards. Most PD is short-term. Responsibility for PD is exclusively dependent on teachers volunteering. PD is largely opportunistic rather than strategic.	The district values professional development as an integral part of teaching and learning, prioritizes the needs of teachers, and demonstrates understanding of he value of job-embedded PD (i.e. the PD is based on a growth model, grounded in knowledge about teaching, models expected behaviors, and is constructivist in nature.) PD is sustained, includes substantive follow-up, and is based on a coherent plan developed by teachers, administrators, and other stakeholders. Resources are allocated.
CLASSROOM PRACTICE	Use of inquiry-based and investigative teaching and assessment strategies is lacking. There is much reliance on lecture, texts, and worksheets. Teachers are dispensers and holders of information. Assessment is primarily paper/pencil tests focused on student recall.	Most teachers use inquiry and investigative-based teaching and assessment strategies. Most teachers assume the role of facilitator of student-directed learning – providing hands-on opportunities for students, real-world examples, projects, and extensive problem solving. Teachers use student feedback to design learning experiences in accordance with realizing the standards. Ongoing and multi-method assessment, an emphasis on authentic and performance-oriented approaches, is an instructional

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ELEMENT	1=OLD SYSTEM	5=EXEMPLARY
		strategy.
COMMUNITY AND PARENT INVOLVEMENT	Parent and community involvement is limited to parent attendance at conferences and school events, running PTOs and booster clubs, some volunteer work in elementary schools. Community involvement consists of career days or speakers, supportive learning experiences for students in particular tracks, and attendance at school events or functions.	Districts show evidence of involving parents and community in substantive ways in the change process. Parents and community persons are empowered by their inclusion in capacity-building opportunities taking leadership roles in improvement efforts. There is evidence of new types of services offered to the community by the schools and new resources being provided to the schools.
ADMINISTRATION AND LEADERSHIP	Administration is not engaged in the reform process. Inconsistent messages are sent regarding the importance and value of science and mathematics reform. Administrators do not provide leadership that would promote or sustain high quality teaching and learning in mathematics and science. District may be in a dysfunctional period.	Administrators are proactive, informed advocates for mathematics and science education reform – actively engaged in the improvement process. The administration works to empower teachers and community, and collaborates effectively with various constituencies in leading the reform process. Administrators facilitate a shared vision of mathematics and science teaching and learning based on the state and national standards.

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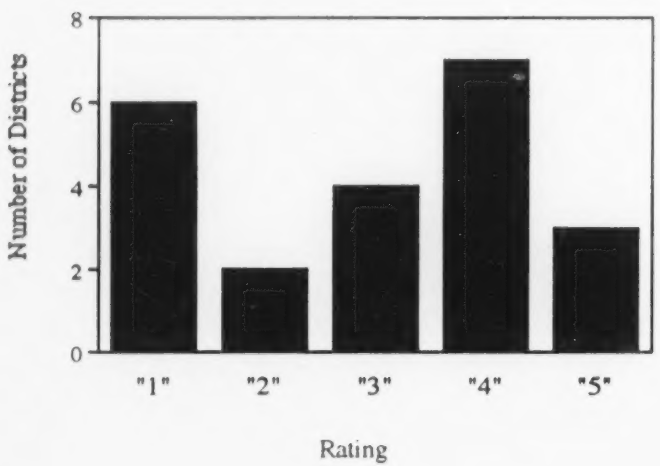
Appendix 2. Results of Ratings of Six Elements of District Reform

SYSTEM CHANGE

Average of ratings across districts= 2.9
Most frequent rating= 4
Median rating (half of the districts above this rating and half below) =3

"1" (OLD SYSTEM)

Among the six districts categorized as 1's, in two districts building autonomy was seen as a deterrant to overall system change since there was more emphasis on individual plans than on an overarching vision or emphasis on mathematics and science education. Poorly positioned design teams or design teams with little influence were also found in these districts. In one district, more urgent student needs precluded the need for system reform.



"5" (EXEMPLARY)

Three districts thought to be exemplary with respect to system reform had already put into place, some mechanisms for strong internal and external networking. Shared decision-making, utilizing the full range of stakeholders was enabled through deliberate capacity-building efforts.

"2" Among the two districts rated as 2's , there was minimal integration with other school improvement plans, little evidence of networking around reform, and no attention to needed policy changes. Fragmented decision making was also seen in these two districts.

"3" Three of the four districts in this category were similar in terms of having aligned their plans and efforts internally, but demonstrating top-down decision making style. The fourth district lacked the cohesive structure brought about by aligning plans, but had enacted many policies and built supporting networks to support the reforms suggested

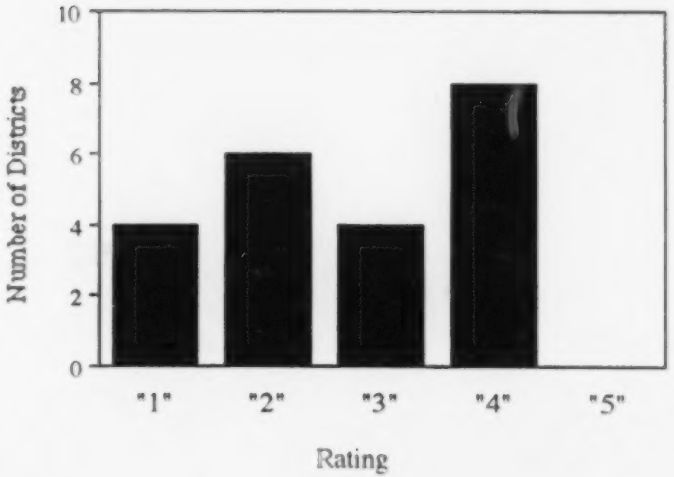
"4" Among the seven districts, all had integrated with other planning efforts in the district. Four districts still demonstrated little shared decision-making, but more evidence of policy changes and holistic approaches to reform were found. Networking with other districts was weak in all seven districts.

CURRICULUM

Average of ratings across districts= 2.7
Most frequent rating= 4
Median rating (half of the districts above this rating and half below) =3

"1" (OLD SYSTEM)

Four districts were found to be characteristic of the "old system," with an unwritten or unused curriculum document so that scope and sequence of content is determined by individual teachers. In one of the four districts, a standards-based document was written, but was not used by teachers or for selecting texts. In all 4 districts, piecemeal changes in curriculum were seen (particularly add-ons to current curriculum).



"5" (EXEMPLARY)

None of the districts were found to have completed their work to align, vertically articulate, and integrate their mathematics and science curricula across grades. The lack of resources and policies to support the curricula was not found to be a large problem in the Focus Districts.

"2" The six districts rated as 2's had each made some progress in aligning and articulating their curricula with state and national standards. In 3 of the districts, committees had been formed and begun to develop the K-12 scope and sequence, but these were not complete. Inadequate materials for supporting the curriculum was cited as a problem in 2 districts.

"3" The four districts rated 3's were dissimilar in their strengths and challenges with respect to curriculum. Two districts had coherent, aligned curricula in place, but did not have the resources or appropriate policies for implementation. The other two were still working to align their curricula with state and national standards. Two districts made more progress with the mathematics curriculum than science.

"4" Standards-based curricula were complete with policies and resources to support the curricula were evident in almost all 8 of the districts. Two common shortcomings were found: (1) work to vertically align the curricula and to assure coherency across grade levels and across several adopted "pieces" (like Connected Math) was incomplete, and (2) several districts had progressed farther in one subject than the other.

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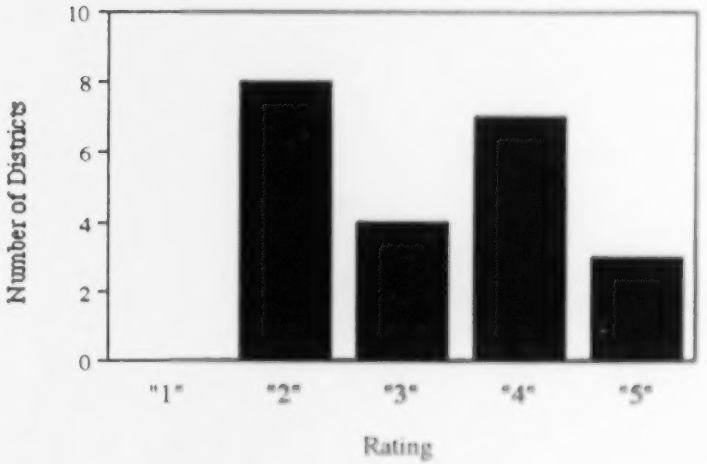
PROFESSIONAL DEVELOPMENT

Average of ratings across districts= 3.2
Most frequent rating= 2 (although 4 is also high)
Median rating (half of the districts above this rating and half below) = 3

"1" (OLD SYSTEM)

None of the Focus Districts were rated in the lowest category. All districts had progressed beyond the old system of disjointed and disorganized PD operating on a volunteer basis.



"5" (EXEMPLARY)

Districts found to be exemplary had developed and implemented strategic PD plans, using best practices of modeling instruction, sustained PD with follow-up and measurable goals for changing instruction, significant teacher input to the PD planning process, and focus on constructivism. All districts had allocated resources to bring about these changes.

"2" The eight districts that received a rating of 2 showed some overall progress in PD--generally in providing some organization or structure for PD. The most common shortcoming among this group was the lack of a strong, cohesive plan for mathematics and science PD opportunities. Also, teachers generally expressed low satisfaction in their PD opportunities; and there was little innovative PD evidenced in these districts.

"3" Four districts rated as 3's demonstrated different kinds of both strengths and weaknesses. One district had implemented a job-embedded, personalized, continuing model for PD that occurred only in one subject area. One district had instituted common planning time that was used for PD, but did not have a strategic plan for teacher professional development. Another had a strong plan and good structures, but no opportunities for job-embedded learning.

"4" Among the districts rated "4," a common theme was that many opportunities in math and science PD existed. Many teachers in these 7 districts reported extensive amounts of content PD. Innovative strategies and methods were also reported: peer teaching, collegial planning time, constructivist modeling. Strategic plans for PD existed but were not fully operational.

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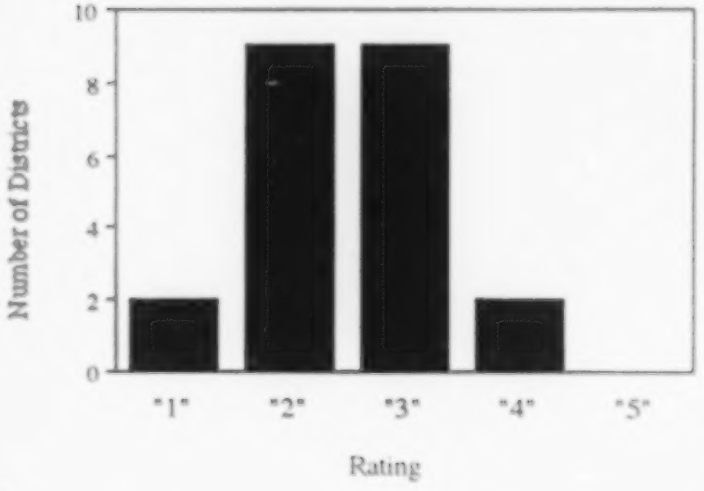
CLASSROOM PRACTICE

Average of ratings across districts= 2.5
Most frequent rating= 2 and 3
Median rating (half of the districts above this rating and half below) =2.5

"1" (OLD SYSTEM)

Two districts characteric of the "old system" with teachers reporting high use of traditional teaching and assessment methods. Teachers in these districts also reported little development of the facilitator role in the classroom.



"5" (EXEMPLARY)

None of the districts were thought to have most of their teachers using inquiry and investigative based teaching and assessment. Assuming the role of facilitator over the traditional role of information disseminator is still seen only rarely.

"2" Nine districts, rated as 2's, demonstrated only limited changes in the classroom practices of teachers. In these districts, traditional methods were reported to predominate and methods associated with constructivism (hands-on, collaborative learning groups) were found in only a few classrooms or in few situations.

"3" Nine districts rated as "3" were found to have made moderate progress with respect to classroom instructional practices. In some cases, this has taken the form of innovative practices in a small number of classrooms, while in other districts, this has appeared as new directions in instructional or assessment techniques on a broader, but less intensive scale. Hands-on, cooperative learning, project-based learning, and multiple assessment methods were evidenced.

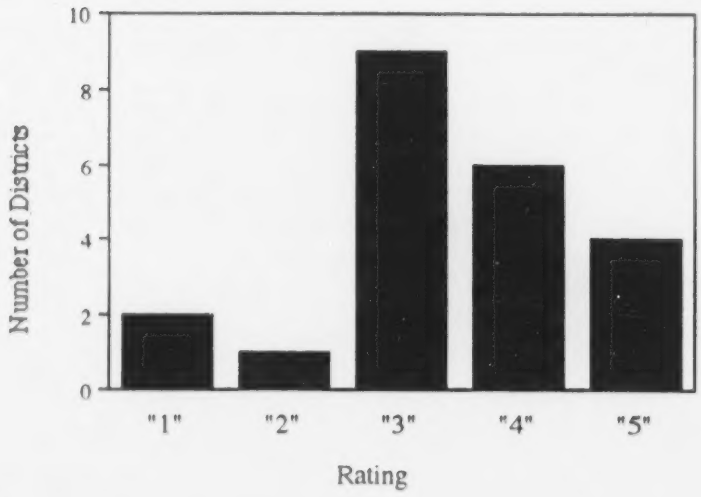
"4" Two districts were found in which classroom practice had progressed significantly toward the definition of "exemplary." In both districts, it was found that many teachers were prepared to begin teaching in the new paradigm, and that many teachers had, in fact, made changes in their teaching and assessment practices. However, this had not been implemented in "most" classrooms as yet.

COMMUNITY AND PARENT INVOLVEMENT

Average of ratings across districts= 3.4
Most frequent rating= 3
Median rating (half of the districts above this rating and half below) = 3

"1" (OLD SYSTEM)

Two districts were found that remained in the old system with respect to community and parent involvement. In these districts, parent involvement included attendance at conferences and school events, running PTOs and booster clubs, and some volunteer work in elementary schools. Community involvement consisted of career days or speakers, cooperative learning experiences for students in particular school tracks, and attendance at school events or functions.



"5" (EXEMPLARY)

The four exemplary districts in parent and community involvement demonstrated such innovative practices as including parents in inservices and training; organizing computer-equipped, community-staffed homework stations in outlying communities; working closely with a community foundation to accomplish mutually important goals; and engaging parents in decision-making via numerous committees and task forces.

"2" The one district rated "2" showed some innovative programs to involve parents and community in the district by sponsoring meals in conjunction with board of education meetings. Although there is still little movement, the intial steps to change the relationships with the community is started.

"3" The predominant pattern of districts rated as "3's" was one of strong outreach to parents and partnerships established with organizations and businesses in the community. What was not in evidence: attitudes or activities that would empower community members.

"4" Among the districts rated "4," significant and innovative links with the community were established and parent/ community empowerment strategies were in early or developmental stages. Examples showed that districts had utilized unique community resources to address unique community needs: one district with a large Native American population had developed specific communications links to bridge the gap between community and school.

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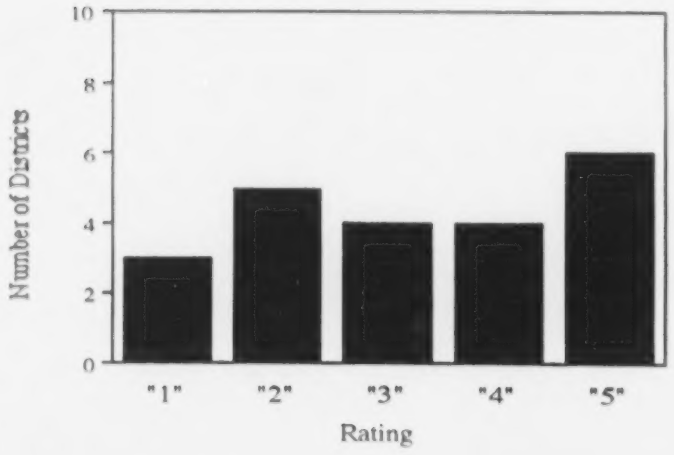
ADMINISTRATION AND LEADERSHIP

Average of ratings across districts= 3.2
Most frequent rating= 5
Median rating (half of the districts above this rating and half below) = 3

"1" (OLD SYSTEM)

Three districts were rated in the lowest category. All three had experienced considerable turmoil and two had mulitple superintendent turnovers during the time of the grant that led to an instability of leadership and dysfunction.



"5" (EXEMPLARY)

The 6 exemplary districts had already put into place, some significant means for empowering teachers and community members for decision making. In all six, the administrator also was perceived to be a strong advocate for mathematics and science reform, with a clear vision that was shared by district stakeholders. Specific actions were taken by top administrators to support

"2" Two of the five districts rated as 2's demonstrated significant turmoil related to changes in top leadership positions. In the other three, inconsistent messages from top leadership, inadequate support for teachers, little or no focus on mathematics and science, and top-down management style were cited as challenges.

"3" A common characteristic among the four districts rated 3's was that district leaders were advocates for mathematics and science reform. What was not found was teacher involvement in decision making and strong administrator support for teachers. Considerable variation within districts by building-- regarding the priority of mathematics and science education--was also a common point.

"4" The districts in this group were moving toward, but had not yet realized broader-based participation in decision making. In all 4 districts, there were some beginning efforts to involve teachers and community members with significant decision making. In general, the leadership in these districts advocated for mathematics and science education, and were fairly stable in their positions.

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